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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/963,625	09/27/2001	Yar-Ming Wang	GP-301034	9716	
7.	590 08/08/2002				
JEFFREY A. SEDLAR General Motors Corporation Legal Staff, Mail Code 428-C23-B21 P.O. Box 300			EXAMINER		
			WONG, EDNA		
Detroit, MI 48265-3000			ART UNIT	PAPER NUMBER	
			1741	3	
			DATE MAILED: 08/08/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

		• 🗸 🔻		45-3			
		Application No.	Applicant(s)				
Office Action Summary		09/963,625	WANG ET AL.				
		Examiner	Art Unit				
		Edna Wong	1741				
Th MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHO THE N - Exter after - If the - If NO - Failui - Any re	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION is ions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by statuely received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however ply within the statutory minir d will apply and will expire SI tte, cause the application to b	er, may a reply be timely filed num of thirty (30) days will be considered tim X (6) MONTHS from the mailing date of this ecome ABANDONED (35 U.S.C. § 133).	nely. communication.			
1)	Responsive to communication(s) filed on						
2a)□		his action is non-fin	al.				
3)	Since this application is in condition for allow	wance except for for	mal matters, prosecution as to	the merits is			
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
•	Claim(s) 1-7 is/are pending in the application	n.					
ŕ	4a) Of the above claim(s) is/are withdr	awn from considerat	ion.				
5)	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-7</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement. Application Papers							
9)⊠	The specification is objected to by the Examir	ner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)	☐ All ·b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority docume						
	2. Certified copies of the priority docume						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) 🗌 <i>A</i>	Acknowledgment is made of a claim for dome	stic priority under 35	U.S.C. § 119(e) (to a provision	nal application).			
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachmen	t(s)						
2) Notice	ce of References Cited (PTO-892) be of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5)	Interview Summary (PTO-413) Paper I Notice of Informal Patent Application (I Other:				
10.0-1117	rademark Office						

Specification

The disclosure is objected to because of the following informalities: page 2, line 12, it is unclear what is meant by "□".

Appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

Claims **2-4 and 7** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2

line 2, it appears that "a temperature" is the same as or further limiting that recited in claim 1, line 5. However, it is unclear if it is.

lines 2-3, it appears that "a current density" is the same as or further limiting that recited in claim 1, line 6. However, it is unclear if it is.

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Claim 4

line 3, "the electrolyte" lacks antecedent basis.

line 4, "(10 to 25 V)" is indefinite.

Claim 7

line 1-4, is a duplicate of claim 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- I. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sekinger et al.** (US Patent No. 5,975,976)

Sekinger teaches a method of forming a bright anodized coating on a surface of an aluminum alloy article, when said alloy contains more than 3% by weight magnesium (= 0.25 wt.% to 5 wt.% magnesium) [col. 4, lines 56-59], said method comprising:

anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid per liter of bath (= 40 to 350 g/l) [col. 6, lines 30-33] at a temperature (= -5 and 85 °C) [col. 5, lines 25-36] and a current density (= 100 to 3000)

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A/m²) [col. 5, line 66 to col. 6, line 3] that produces a desired thickness (= 50 nm to 20 μ m) [= col. 5, lines 1-9].

The temperature is in the range of 18 to 25 °C (= -5 and 85 °C) [col. 5, lines 25-36] and the current density is in the range of about 3 A/ft² to no more than 10 A/ft² (= 32.29 A/m^2 to 107.64 A/m^2) [= $100 \text{ to } 3000 \text{ A/m}^2$] (col. 5, line 66 to col. 6, line 3).

Prior to the anodizing step, the surface to be anodized is immersed in an aqueous acid solution (= nitric acid) at a temperature below about 100°F (= 38°C) [= 20-25°C], said solution comprising 10-30% nitric acid (= 25 to 35 wt.%) [col. 5, lines 40-47].

The surface is established as an anode (col. 5, lines 29-36) in a direct current circuit (col. 7, lines 47) with said solution as the electrolyte and applying a direct current voltage to said surface (= 10 to 100 V) [col. 5, line 66 to col. 6, line 3].

Sekinger does not teach producing a clear anodized layer suitable for color finishing.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one skilled in the art would have been motivated to have modified the method of Sekinger by producing a clear anodized layer suitable for color finishing because Sekinger appears to disclose a method at least in a similar manner as instantly claimed. There does not appear to be any method limitations set forth in the instant claims to distinguish the instant claims from the prior art. Therefore, it would have been within the skill of the art to expect that

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the method disclosed by Sekinger produces a clear anodized layer suitable for color finishing, absent evidence to the contrary.

As to wherein the immersing is until the magnesium content in said surface is reduced to less than 3% and to produce a glossy surface, Sekinger appears to disclose a method at least in a similar manner as instantly claimed. There does not appear to be any method limitations set forth in the instant claims to distinguish the instant claims from the prior art. Therefore, it would have been within the skill of the art to expect that the method disclosed by Sekinger immerses the surface to be anodized until the magnesium content in said surface is reduced to less than 3% and to produce a glossy surface, absent evidence to the contrary.

Furthermore, Sekinger teaches neutralizing for 20 to 60 seconds (col. 5, lines 43-47).

As to during said immersing step, establishing said surface as an anode in a direct current circuit with said solution as the electrolyte and applying a direct current voltage to said surface, Sekinger teaches that the electrolyte may be a mixture of sulfuric acid, phosphoric acid, chromic acid, oxalic acid, sulphaminic acid, malonic acid, maleic acid and/or sulphosalacyclic acid, e.g., 250-300 g/l maleic acid and 1-10 g/l sulfuric acid (col. 6, lines 23-42). Thus, 10-20% sulfuric acid, 10-30% nitric acid or 40-80% phosphoric acid appears to be well within the skill of the artisan since the

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concentration of the solution is a variable as taught by Sekinger.

Furthermore, the repetition of the <u>anodizing step</u> to provide the same results is well within the skill of one having ordinary skill in the art. The concept of duplication is not patentable. *St. Regis Paper Co. v. Bemis Co. Inc.*, 193 USPQ 8, 11 (7th Cir. 1977). While this decision relates to the duplication of parts, there is no reason why such duplication cannot be extended to a process step.

II. Claims **5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sekinger et al.** (US Patent No. 5,975,976)

Sekinger teaches a method of making a component, said component comprising a formed sheet of an aluminum alloy containing more than about 4% by weight magnesium (= 0.25 wt.% to 5 wt.% magnesium) [col. 4, lines 56-59], said method comprising:

- (a) forming said sheet into a component having a surface requiring a decorative finish (col. 4, lines 33-43);
- (b) anodizing said surface in an aqueous sulfuric acid bath containing 100 to 200 grams of sulfuric acid (= 40 to 350 g/l) [col. 6, lines 30-33] at a temperature in the range of 18 to 25°C (= -5 and 85 °C) [col. 5, lines 25-36] and a current density in the range of about 3 to no more than 10 A/ft² (= 100 to 3000 A/m²) of said surface to form a coating of aluminum oxide [col. 5, line 66 to col. 6, line 3] having a thickness of about 10 to 25 μ m (= 50 nm to 20 μ m) [=col. 5, lines 1-9].

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Prior to the anodizing step, the surface to be anodized is immersed in an aqueous acid solution (= nitric acid) at a temperature below about 100°F (= 38°C) [= 20-25°C], said solution comprising 10-30% nitric acid (= 25 to 35 wt.%) [col. 5, lines 40-47].

Sekinger does not wherein the coating of aluminum oxide is clear.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one skilled in the art would have been motivated to have modified the method of Sekinger with wherein the coating of aluminum oxide is clear because Sekinger appears to disclose a method at least in a similar manner as instantly claimed. There does not appear to be any method limitations set forth in the instant claims to distinguish the instant claims from the prior art. Therefore, it would have been within the skill of the art to expect that the method disclosed by Sekinger produces a clear anodized layer, absent evidence to the contrary.

As to wherein the component is a body component for an automotive vehicle, a preamble is not necessarily accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. *In re Hirao* 535 F. 2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie* 187 F 2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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Citations

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Komatsubara et al. (US Patent No. 5,181,969) is cited to teach anodizing a rolled aluminum alloy containing 2-8% magnesium (col. 2, lines 43-52) in 15% sulfuric acid electrolyte at a temperature of 20°C and at a current density of 1 A/dm² to form a coating of aluminum oxide having a thickness of 20 μm (col. 12, lines 5-32).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (703) 308-3818. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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Edna Wong Primary Examiner Art Unit 1741

EW August 7, 2002